

**Amendments To The Claims:**

Please amend the claims 1, 3, 4 and 5 as follows:

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1. (Currently Amended) A bipolar transistor, comprising:
    - a first semiconductor layer to be a collector layer formed on a substrate and including an impurity of a first conductive type;
    - a second semiconductor layer to be a base layer formed on said first semiconductor layer and including an impurity of a second conductive type;
    - a third semiconductor layer formed on said second semiconductor layer from a material having a bandgap different from a bandgap of said second semiconductor layer;
    - an insulator film provided on said third semiconductor layer;
    - an opening portion formed through said insulator film to reach said third semiconductor layer; and
    - an emitter connecting electrode made of a conductor material and brought into contact with said third semiconductor layer by filling said opening portion in said insulator film,
    - wherein said third semiconductor layer includes an emitter diffusion layer of the first conductive type positioned below said opening portion, and a peripheral layer ~~including the impurity of the second conductive type at least in an upper part thereof at a region~~ located at a side of said emitter diffusion layer, and
    - said peripheral layer includes the impurity of the second conductive type so as to be distributed at a high concentration in an upper part, at a low concentration at the center and at a high concentration in a lower part within the peripheral layer.

2. (Original) The bipolar transistor according to claim 1, wherein:

B<sup>1</sup> said insulator film is formed from a silicon dioxide film doped with the impurity of the second conductive type; and

the impurity of the second conductive type included in at least a part of the top portion of said third semiconductor layer is the impurity of the second conductive type out-diffused from said insulator film.

3. (Currently Amended) The bipolar transistor according to claim 1, further comprising:

a polysilicon film, doped with the impurity of the second conductive type and provided so as to contact said third semiconductor layer at a portion located outside of said ~~underlying~~ insulator film and to extend over said insulator film, for functioning as a base connecting electrode,

wherein the impurity of the second conductive type included in at least a part of the top portion of said third semiconductor layer is the impurity of the second conductive type out-diffused from said polysilicon film by passing through said insulator film.

4. (Currently Amended) The bipolar transistor according to ~~any one of claims~~ claim 1 through 3, wherein the impurity of the first conductive type in the emitter diffusion layer of said third semiconductor layer is the impurity of the first conductive type out-diffused from said emitter connecting electrode.

5. (Currently Amended) The bipolar transistor according to ~~any one of claims~~ claim 1 through 3, wherein:

B<sup>1</sup>

said substrate is a silicon substrate;

said first semiconductor layer is ~~an~~ a Si layer;

said second semiconductor layer is ~~an~~ a SiGe layer or ~~an~~ a SiGeC layer; and

said third semiconductor layer is ~~an~~ a Si layer.

Claims 6-9 (Withdrawn)

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